



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/954,767	09/14/2001	Ruediger Musch	Mo-6587 LeA 34,663	8537

157 7590 02/26/2003

BAYER POLYMERS LLC  
100 BAYER ROAD  
PITTSBURGH, PA 15205

EXAMINER

LEE, RIP A

ART UNIT	PAPER NUMBER
----------	--------------

1713

DATE MAILED: 02/26/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/954,767

Applicant(s)

MUSCH ET AL.

Examiner

Rip A. Lee

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

This office action follows a response filed on December 23, 2002. Applicants have amended claims 1, 4, and 5.

#### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

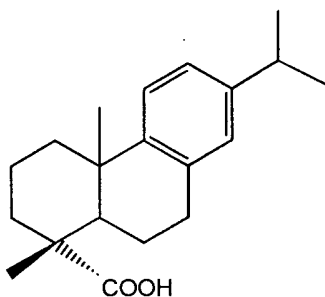
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,926,880 to Esser *et al.*

Esser *et al.* discloses an adhesive composition comprising a polychloroprene latex containing an ethylenically unsaturated comonomer (claim 1). Disproportioned abietic acid (col. 2, line 20) or abietic acid derivatives (col. 2, line 25) are used as emulsifier. Disproportionation of abietic acid results in the formation of dehydro-, dihydro-, and tetrahydroabietic acids.<sup>1</sup> The structure of dehydroabietic acid is shown below.<sup>2</sup>



As can be seen, this compound is a tricyclic diterpenecarboxylic acid that contains at least two conjugated double bonds. Therefore, dehydroabietic acid possesses the structural requirements recited in the present claims. The composition also contains at least one adhesive resin (claim 1). In sum, the subject matter of present claim 1 is anticipated by the prior art.

---

<sup>1</sup> Fiebach, K. in *Ullman's Encyclopedia of Industrial Chemistry* Elvers, B, Hawkins, S., Russey, W., Schulz, G., Eds.; Vol. A23, VCH Publishers, New York: 1993, p. 86.

<sup>2</sup> *ibid.*, p. 82.

5. Claim 3 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over anticipated by Esser *et al.*

The discussion of the disclosures of Esser *et al.* from the previous paragraph of this office action is incorporated here by reference. Regarding claim 3, Esser *et al.* is silent with regard to the open time of the adhesive. However, a reasonable basis exists to believe that the prior art adhesive composition exhibits this feature because it is essentially the same as that presently claimed. Since the PTO can not conduct experiments, the burden of proof is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02.

6. Claims 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esser *et al.*

Esser *et al.* prescribes use of up to 20 wt % of comonomer such as 2,3-dichlorobutadiene in the preparation of polychloroprene polymer (claim 1). The inventors also teach the use of 5-30 % by weight of adhesive resin (claim 1), an example of which is terpene-phenol resin (claim 3, col. 2, line 41, and Example III D). As shown in Table I, zinc oxide in the amount of about 7.5 parts by weight may be incorporated into the composition. The examples in Table I and the do not show use of a tricyclic diterpenecarboxylic acid, as required in present claim 2. However, one having ordinary skill in the art would have found it obvious to arrive at the subject matter of the present claim because use of disproportioned abietic acid as emulsifier is adequately taught in the reference. Moreover, the skilled artisan would find it obvious to use an emulsifier in order to stabilize an aqueous dispersion.

Regarding claim 4, Esser *et al.* is silent with regard to the softening point of the terpene-phenol resin. However, in view of the fact that the reference teaches essentially the same material of the present claims, sufficient reason exists to believe that the terpene-phenol resin of Esser *et al.* also possesses the claimed softening point. Since the PTO does not perform experiments, the burden is shifted to the Applicants to provide evidence to the contrary. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

With respect to claim 5, use of up to 20 wt % of comonomer such as 2,3-dichlorobutadiene in the preparation of polychloroprene polymer is fully disclosed. Although the examples do not show such an embodiment, it would have been obvious to one having ordinary skill in the art to arrive at the present claim because such copolymers are fully disclosed in the patent.

7. Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 4,212,780 to Fitzgerald.

Fitzgerald discloses an adhesive composition comprising 100 parts (by weight) of chloroprene polymer, 4-6 parts of unmodified rosin, hydrogenated rosin, dehydrogenated rosin, and mixtures thereof, 1-50 parts of basic metal oxide, 5-100 parts of modified phenolic resin (claim 1). In one embodiment, the composition contains 4-5 parts of unmodified rosin (claim 2). The metal oxide is MgO (claim 6). The composition is prepared by polymerizing chloroprene in an aqueous emulsion in an emulsifying system containing 4-5 parts rosin and polymerizable

Art Unit: 1713

monomer (claim 13). Specifically, said rosin is unmodified, and it contains conjugated unsaturated acids (claims 15 and 16). According to the inventors, the term chloroprene polymer encompasses polymers containing comonomers such as 2,3-dichloro-1,3-butadiene such that the amount of comonomer is less than 25 mole % (col. 3, lines 49-59). As such, claims 1, 2, 5, and 6 are anticipated by Fitzgerald.

Regarding claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fitzgerald. The reference does not teach the open time of the adhesive compositions therein. Since the prior art composition is essentially the same as that presently claimed, a reasonable basis exists to believe that such an adhesive also possesses the claimed open time. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

***Response to Arguments***

8. The following rejections set forth in the previous office action (Paper No. 7) have been overcome by amendment:

- i) Rejection of claim 5 under 35 U.S.C. 112, second paragraph.
- ii) Rejection of claims 1 and 5 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,298,580 to Wendling *et al.*
- iii) Rejection of claims 1, 2 and 6 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,872,043 to Branlard *et al.*
- iv) Rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Branlard *et al.*

9. The Applicants traverse the following:

- i) Rejection of claim 2 under 35 U.S.C. 112, second paragraph.
- ii) Rejection of claims 1, 2 and 4-6 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,926,880 to Esser *et al.* in view of Wendling *et al.*

The Applicant's arguments have been considered fully, and consequently, the rejections have been withdrawn.

*Conclusion*

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. The prior art made of record but not relied upon is considered pertinent to the Applicant's disclosure.

U.S. 2002/0120045 to Musch *et al.*  
GB 1,082,549 to Barth  
U.S. Patent No. 5,552,519 to Hemmings *et al.*  
U.S. Patent No. 5,407,993 to Lyons *et al.*  
U.S. Patent No. 5,332,771 to Christell  
U.S. Patent No. 5,053,468 to Branlard *et al.*  
U.S. Patent No. 4,477,613 to Evans *et al.*  
U.S. Patent No. 3,929,703 to Weymann *et al.*  
U.S. Patent No. 3,242,113 to Kell  
Re 29,157 to Petersen *et al.*

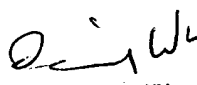
Art Unit: 1713

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

ral

February 13, 2003

  
DAVID W. WU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700